



Warren CERT eNews



Not if..... When Always Vigilant - Always Prepared

Volume 4 Issue 7

July 2018

This newsletter is brought to you by the Executive Board and is meant to give you the latest news and information from around the organization as well as further your capabilities in a disaster or emergency situation. - *Michael Riley*

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SEVERE WEATHER 101 - LIGHTNING

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What is lightning?

Lightning is a giant spark of electricity in the atmosphere between clouds, the air, or the ground. In the early stages of development, air acts as an insulator between the positive and negative charges in the cloud and between the cloud and the ground. When the opposite charges build up enough, this insulating capacity of the air breaks down and there is a rapid discharge of electricity that we know as lightning. The flash of lightning temporarily equalizes the charged regions in the atmosphere until the opposite charges build up again.

Lightning can occur between opposite charges within the thunderstorm cloud (intra-cloud lightning) or between opposite charges in the cloud and on the ground (cloud-to-ground lightning).

Lightning is one of the oldest observed natural phenomena on earth. It can be seen in volcanic eruptions, extremely intense forest fires, surface nuclear detonations, heavy snowstorms, in large hurricanes, and obviously, thunderstorms.

What causes lightning?

The creation of lightning is a complicated process. We generally know what conditions are needed to produce lightning, but there is still debate about exactly how a cloud builds up electrical charges, and how lightning forms. Precipitation and convection theories both attempt to explain the electrical structure within clouds.

Precipitation theorists suppose that different sized raindrops, hail, and graupel get their positive or negative charge as they collide, with the heavier particles carrying negative charge to the lower part of the cloud.

Convection theorists believe that updrafts transport positive charges found near the ground upward through the cloud while downdrafts carry negative charges downward.

Leason's

DAIRY BAR & GRILLE



FUNDRAISER



Come out and support Warren CERT

Fri	May 18	4:00pm-8:00pm
Fri	Jun 15	4:00pm-8:00pm
Fri	Jul 20	4:00pm-8:00pm
Fri	Aug 17	4:00pm-8:00pm
Fri	Sep 14	4:00pm-8:00pm
Fri	Oct 19	4:00pm-8:00pm

Come support CERT and enjoy some awesome food & treats!

There may be surprise visits from Warren Police, Firefighters,
and maybe even our new K9's and their Handlers

You might even meet some of the officers from our new Community Policing Unit



Where does lightning strike?

Tall objects such as trees and skyscrapers are commonly struck by lightning. Mountains also make good targets. The reason for this is their tops are closer to the base of the storm cloud. Remember, the atmosphere is a good electrical insulator. The less insulation the lightning has to burn through, the easier it is for it to strike. However, this does not always mean tall objects will be struck. It all depends on where the charges accumulate. Lightning can strike the ground in an open field even if the tree line is close by.

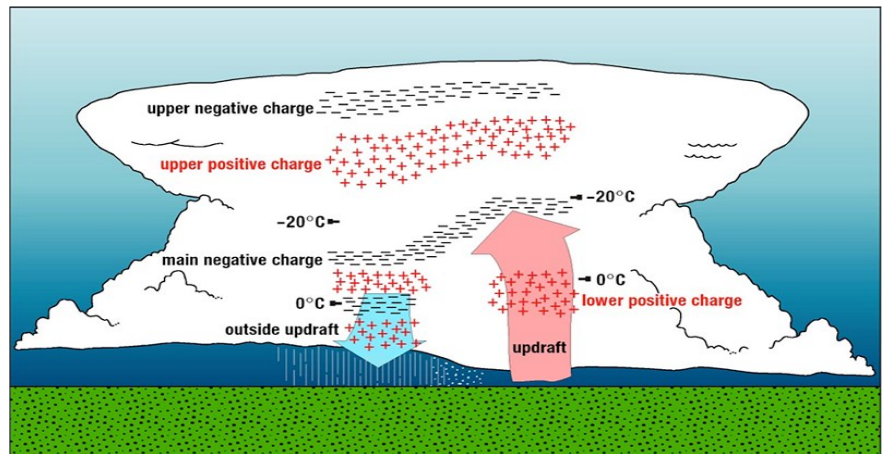
What causes thunder?

Lightning causes thunder! Energy from a lightning channel heats the air to around 18,000 degrees Fahrenheit. This causes the air to rapidly expand, creating a sound wave known as thunder. The stepped leader causes the initial tearing sound, and the ground streamer causes the sharp click or crack heard at a very close range, just before the main crash of thunder.

Thunder can be heard up to 25 miles away from the lightning discharge. At these distances, thunder sounds like a low rumble because the higher frequency pitches are more easily absorbed by the surrounding environment, and the sound waves set off by the lightning discharge have different arrival times.

How is electrical charge distributed through a thunderstorm?

A conceptual model shows the electrical charge distribution inside deep convection (thunderstorms), developed by NSSL and university scientists. In the main updraft (in and above the red arrow), there are four main charge regions. In the convective region but outside the outdraft (in and above the blue arrow), there are more than four charge regions.



Lightning Types

Lightning strikes the ground, the air, or inside clouds. There are roughly 5 to 10 times as many cloud flashes as there are cloud-to-ground flashes.

There are two types of ground flashes: natural (those that occur because of normal electrification in the environment), and artificially initiated or triggered. Artificially initiated lightning includes strikes to very tall structures, airplanes, rockets and towers on mountains. Triggered lightning goes from ground to cloud, while "natural" lightning is cloud to ground.

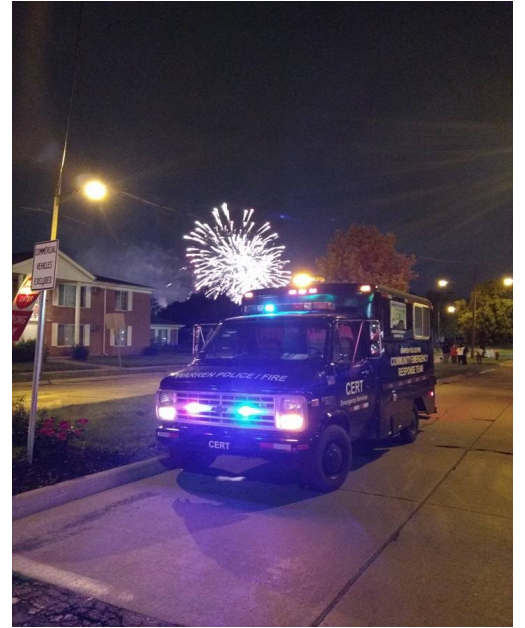
In cloud-to-ground lightning (CG), a channel of negative charge, called a stepped leader, will zigzag downward in roughly 50-yard segments in a forked pattern. This stepped leader is invisible to the human eye, and shoots to the ground in less time than it takes to blink. As it nears the ground, the negatively charged stepped leader is attracted to a channel of positive charge reaching up, a streamer, normally through something tall, such as a tree, house, or telephone pole. When the oppositely-charged leader and streamer connect, a powerful electrical current begins flowing. A return stroke of bright luminosity travels about 60,000 miles per second back towards the cloud. A flash consists of one or perhaps as many as 20 return strokes. We see lightning flicker when the process rapidly repeats itself several times along the same path. The actual diameter of a lightning channel is one-to two inches.

A typical cloud-to-ground flash is a negative stepped leader that travels downward through the cloud, followed by an upward traveling return stroke. The net effect of this flash is to lower negative charge from the cloud to the ground. Less common, a downward traveling positive leader followed by an upward return stroke will lower positive charge to earth.

[Lightning Safety Tips from NWS Missoula](#)

THE MONTH IN REVIEW - CALL OUTS, DEPLOYMENTS, AND EVENTS

Sat	Jun 2	General Membership Meeting
Sat	Jun 2	CN Railroad Crossing 8 & Groesbeck
Mon	Jun 4	WWT Graduation Bethesda Church
Tue	Jun 5	3918 Ida Down Wire
Fri	Jun 8	Centerline Festival
Sat	Jun 9	Centerline Fireworks
Fri	Jun 15	Leason's Fundraiser
Sun	Jun 17	Exec Board Meeting
Sun	Jun 17	Wires Down in 12 Mile
Tue	Jun 19	FSE Day 1
Wed	Jun 20	FSE Day 2
Wed	Jun 27	12/Mound Lights down



1036.5 Total Volunteer Hours

545 - Call-Out / Events

111 - Meeting / Training Hours

279 - Executive Board / Administrative / Education

Visiting Teams 101.5

Warren CERT would like to thank Sterling Hts. CERT, Dearborn CERT, Farmington Hills CERT, MI Volunteer Defense Force, Livonia CERT, Ann Arbor CERT, and Macomb County Medical Reserve Corps; Without your members participation in our FSE it would not have been such a success!!



UPCOMING EVENTS

Full details available at meetings, emails, and official CERT calendar

Wed Jul 4	Halmich Park Fireworks Patrol	
Jul 6, 7, 8	Middle Eastern American Festival City Square	<u>Prism Lights Needed</u>
Sun Jul 15	12:00-16:00 Oakland County Family Safety Day	Oakland Cty Fair Grounds
Fri Jul 20	16:00-20:00 Leason's Fundraiser	
Sat Jul 21	09:00-13:00 Document Shred Day	City Square
Sat Jul 28	09:00-12:00 Gas Hazards Awareness Training	Warren Community Ctr
Sat Aug 4	09:00-13:00 General Membership Meeting	Warren Community Ctr
Sat Aug 4	12:00-16:00 Warren Police & Fire Open House	PD Offices
Aug 13, 14, 15	Boy Scout Training Exercise (Overnight)	Eckstein Park
Fri Aug 17	16:00-20:00 Leason's Fundraiser	
Fri Aug 24	18:00-23:00 Birthday Bash Fireworks	VanDyke Ave
Fri Sep 14	16:00-20:00 Leason's Fundraiser	
Sat Sep 22	09:00-14:00 Fall Animal Clinic	
Sat Sep 29	12:00-18:00 Warren Oktoberfest	Halmich Park
Sat Oct 6	09:00-13:00 General Membership Meeting	Warren Community Ctr
Fri Oct 19	16:00-20:00 Leason's Fundraiser	
Sat Oct 20	12:00-18:00 Harvest Treat	
Wed Oct 31	17:00-21:00 Halloween Candy Check	Station 1
Sat Dec 1	09:00-13:00 Family Appreciation Breakfast	
Sat Dec 1	17:00-20:00 Tree Lighting	City Square

Unless otherwise indicated meetings will be held at
Warren Community Center 5460 Arden Ave, Warren, MI 48092

Watch the CERT Calendar for the latest location information and other training dates.

[Make sure you follow Warren CERT on Facebook & Twitter](#)

<https://www.facebook.com/wrncert/>

[@WarrenCERT](#)

EMERGENCY NUMBERS TO HAVE IN YOUR CELL

ICE: In Case of Emergency – Make it easy for emergency responders to find your emergency contact when they need to. I suggest you list every number separately: ICE-Husband, ICE-Wife, ICE- Brother, etc. Emergency responders need to know who these people are when calling them.

Fire Department

Warren FD Emergency 586-574-9111
WFD Non-Emergency 586-756-2800

Police Department

Warren PD Emergency 586-574-9111
WPD Non-Emergency 586-574-4700

Sheriff's Dept.

Macomb County Sheriff Emergency 586-469-5502
Oakland County Sheriff Emergency 248-858-4930

Michigan State Police - 800-495-4677 / 313-237-2450

DTE Energy - 800-477-4747

Consumers Energy - 800-477-5050

Poison Control – 800-222-1222

Nearby Hospitals

St. John Macomb-Oakland Hospital, Warren 586-573-5000
St. John Macomb-Oakland Hospital, Madison Heights 248-967-7000
Beaumont Hospital - Royal Oak 248-898-5000
St. John Hospital and Medical Center 313-343-4000

Doctor – This number is elementary and one you probably already have listed!

Neighbors – Know your neighbors and exchange numbers.

Tow Truck – List a few local tow companies or your AAA number.

Insurance Agent – Find out who to call in case you have an accident or home damage. Some companies use a main incident reporting number separate from your local agent. List both.

Ecclesiastical leaders – When disaster strikes our church leaders and family will be the ones to turn to for help.

Veterinarian – Don't forget your four-legged friends and their needs.

Locksmith – Don't forget the locksmith! If you get caught without a reputable locksmith, you will likely get ripped off.

Coast Guard – if you are on a shoreline or major lake or river. (757) 398-6390

Lost or Stolen Credit Card Hotline

Visa: 1-800-VISA-911 (1-800-847-2911)
MasterCard: 1-800-MC-ASSIST (800-622-7747)
American Express: 1-800-992-3404
Discover: 1-800-DISCOVER (1-800-347-2683)
Diners Club: 1-800-2DINERS (1-800-234-6377)

LIGHTNING MYTHS AND FACTS

Myth: If you're caught outside during a thunderstorm, you should crouch down to reduce your risk of being struck.

Fact: Crouching doesn't make you any safer outdoors. Run to a substantial building or hard topped vehicle. If you are too far to run to one of these options, you have no good alternative. You are NOT safe anywhere outdoors. See our safety page for tips that may slightly reduce your risk.

Myth: Lightning never strikes the same place twice.

Fact: Lightning often strikes the same place repeatedly, especially if it's a tall, pointy, isolated object. The Empire State Building is hit an average of 23 times a year

Myth: If it's not raining or there aren't clouds overhead, you're safe from lightning.

Fact: Lightning often strikes more than three miles from the center of the thunderstorm, far outside the rain or thunderstorm cloud. "Bolts from the blue" can strike 10-15 miles from the thunderstorm.

Myth: Rubber tires on a car protect you from lightning by insulating you from the ground.

Fact: Most cars are safe from lightning, but it is the metal roof and metal sides that protect you, NOT the rubber tires. Remember, convertibles, motorcycles, bicycles, open-shelled outdoor recreational vehicles and cars with fiberglass shells offer no protection from lightning. When lightning strikes a vehicle, it goes through the metal frame into the ground. Don't lean on doors during a thunderstorm.

Myth: A lightning victim is electrified. If you touch them, you'll be electrocuted.

Fact: The human body does not store electricity. It is perfectly safe to touch a lightning victim to give them first aid. This is the most chilling of lightning Myths. Imagine if someone died because people were afraid to give CPR!

Myth: If outside in a thunderstorm, you should seek shelter under a tree to stay dry.

Fact: Being underneath a tree is the second leading cause of lightning casualties. Better to get wet than fried!

Myth: If you are in a house, you are 100% safe from lightning.

Fact: A house is a safe place to be during a thunderstorm as long as you avoid anything that conducts electricity. This means staying off corded phones, electrical appliances, wires, TV cables, computers, plumbing, metal doors and windows. Windows are hazardous for two reasons: wind generated during a thunderstorm can blow objects into the window, breaking it and causing glass to shatter and second, in older homes, in rare instances, lightning can come in cracks in the sides of windows.

Myth: If thunderstorms threaten while you are outside playing a game, it is okay to finish it before seeking shelter.

Fact: Many lightning casualties occur because people do not seek shelter soon enough. No game is worth death or life-long injuries. Seek proper shelter immediately if you hear thunder. Adults are responsible for the safety of children.

Myth: Structures with metal, or metal on the body (jewelry, cell phones, Mp3 players, watches, etc), attract lightning.

Fact: Height, pointy shape, and isolation are the dominant factors controlling where a lightning bolt will strike. The presence of metal makes absolutely no difference on where lightning strikes. Mountains are made of stone but get struck by lightning many times a year. When lightning threatens, take proper protective action immediately by seeking a safe shelter Don't waste time removing metal. While metal does not attract lightning, it does conduct it so stay away from metal fences, railing, bleachers, etc.

Myth: If trapped outside and lightning is about to strike, I should lie flat on the ground.

Fact: Lying flat increases your chance of being affected by potentially deadly ground current. If you are caught outside in a thunderstorm, you keep moving toward a safe shelter.

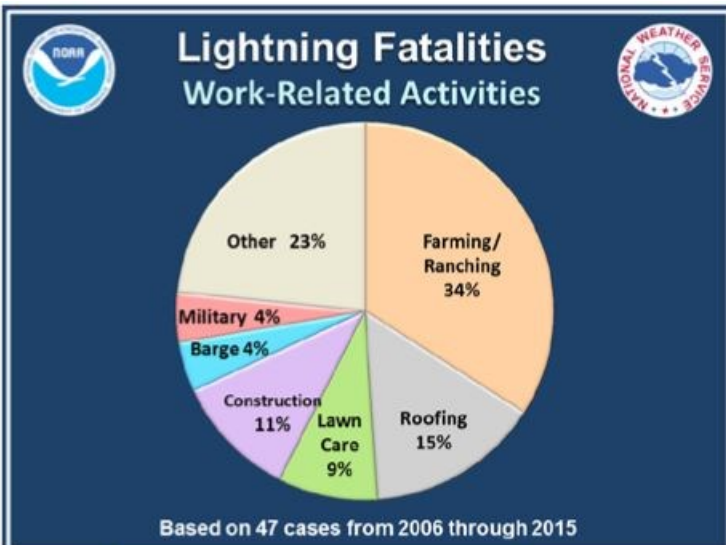
Lightning Myths & Facts

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Coordinator	JoAnn Christian	586-980-2055	kd8stz@yahoo.com	kd8stz
Coordinator	Ryan Prouse	248-259-1226	ryanprouse68@gmail.com	kd8ygv
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Coordinator	Ron Mesic	248-830-8450	rmesic@gmail.com	n8xz
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Coordinator	Eric Bordeaux	586-242-4996	ericbordeaux@comcast.net	
Coordinator	Angela Middleswart	586-219-4329	angelamiddleswart@me.com	

SEVERE WEATHER 101 - LIGHTNING



When Thunder Roars, Go Indoors!

STOP all activities.

Seek shelter in a substantial building or hard-topped vehicle.

Wait 30 minutes after the storm to resume activities.

www.lightningsafety.noaa.gov



Myth: Lightning flashes are 3-4 km apart

Fact: Old data said successive flashes were on the order of 3-4 km apart. New data shows half the flashes are about 9 km apart. The National Severe Storms Laboratory report concludes: "It appears the safety rules need to be modified to increase the distance from a previous flash which can be considered to be relatively safe, to at least 10 to 13 km (6 to 8 miles). In the past, 3 to 5 km (2-3 miles) was as used in lightning safety education.

Myth: A High Percentage of Lightning Flashes Are Forked.

Fact: Many cloud-to-ground lightning flashes have forked or multiple attachment points to earth. Tests carried out in the US and Japan verify this finding in at least half of negative flashes and more than 70% of positive flashes. Many lightning detectors cannot acquire accurate information about these multiple ground lightning attachments.

Myth: Lightning Can Spread out Some 60 Feet After Striking Earth.

Fact: Radial horizontal arcing has been measured at least 20m. from the point where lightning hits ground. Depending on soils characteristics, safe conditions for people and equipment near lightning termination points (ground rods) may need to be re-evaluated.

9 Lightning Facts (that will shock you)

Lightning Quick Facts

- > Lightning often strikes the same place repeatedly if it is a tall, isolated object.
- > Most lightning victims are in open areas or near a tree.
- > Lightning strikes the U.S. about 25 million times each year.
- > Lightning can heat its path through the air to five times hotter than the surface of the sun.

Lightning Trivia

Cape Canaveral Air Force Station/Kennedy Space Center has documented lightning traveling almost 90 miles outward in the thunderstorm anvil.

How far can you see lightning? According to Cape Canaveral/Kennedy Space Center, up to 100-km flashes.

Lightning Causes Forest Fires. Can Forest Fires Cause Lightning? Yes, smoke and carbon micro-particles, when introduced into the upper atmosphere, can become the initiators of static. Sufficient atmospheric static can spark discharge as lightning. Reports of massive lightning storms in coastal Brazil, Peru and Hawaii have been linked to burning of sugar cane fields. The late 90's Mexican forest fires resulted in unusual lightning activity in the USA High Plains area (Lyons, et al.) So too can dust in an enclosed grain elevator create a static discharge. Recent reports (Orville, et al) show the Houston TX petrochemical industry, discharging copious amounts of hydrocarbons into the upper atmosphere, may be responsible for higher-than-normal lightning activity in that area. (National Lightning Safety Institute)

NOAA Satellite Sees Lightning Flashes from Several Storms Across US

And

Lightning Flashes

CERT POLICIES MEMBERS NEED TO KNOW

Warren CERT ID and Lanyard can ONLY be worn when activated as Warren CERT and must NOT be visible when stored in your vehicle. Do not keep lanyards in your cup holders, hanging from your rear view mirror, or other obvious place. You need to assure it does not get stolen or is used to misrepresent the team.

When deployed on Warren CERT events, logos and ID's from any other agency's cannot be worn. This includes, but is not limited to Badges (Security, Hospital, Work, etc.), Shirts or uniforms with logos of other agencies (Police, Sheriff, Fire, Ambulance, Security, even other CERT teams). Displaying multiple identifying marks causes confusion and can possibly place you in unwanted and dangerous circumstances.

Under no circumstances should you self-deploy!! IF YOU SELF-DEPLOY AND ARE INJURED YOU ARE ON YOUR OWN! IF YOU SELF-DEPLOY AND ARE INJURED YOU ARE NOT COVERED BY THE CITY! If you decide to offer assistance without being called out by during a city sanctioned event you are doing so as a civilian and assume all responsibility.

You are authorized to use your red warning light while on official CERT call-outs or events and when you are using it according to CERT guidelines. You must be stationary while it is in use. You are only authorized to use it while in the city of Warren. Your light should not be visible outside of the city

Warren CERT has a Chain of Command and every member is subject to follow it. If you ever have any questions or problems bring it to your executive board. No member will email or call a city official concerning a CERT topic without having gone thru the executive board or Emergency Manager.

Under no circumstances should any member attempt to approach or attempt to move any downed wire!

All safety policies and procedures must be followed at all times.

All members, at all times, must exhibit professionalism.

No smoking, indecent or lewd behavior or discussion will be tolerated.

ANY VIOLATION OF THE ABOVE GUIDELINES COULD RESULT IN DISCIPLINARY ACTION, EXPULSION FROM THE CERT TEAM OR CRIMINAL CHARGES.

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IMPORTANT INFO

Remember to call 586-960-5315 and leave your name, time arrived, time departed, and what scene or event your calling about!

Please like our Facebook page [Facebook.com/wrncert](https://www.facebook.com/wrncert)

**Don't forget to tell your friends and neighbors, about CERT.
We're always looking for good people.**

[Apply at warrencert.org](http://warrencert.org)

Make sure you continue to receive this eLetter and are signed up to the electronic version of the official CERT calendar.

[Check your texcom.com info to assure its current!](http://texcom.com)

Warren CERT Call-Out Procedures

Warren CERT uses Texcom.com as its primary dispatch and notification system.

All CERT members must be registered with Texcom with SMS (texting) and email. *An exception is allowed for members that do not use texting or email.*

When a call out request is received from an official source the on-duty CERT dispatcher will immediately relay the help request to the members via texcom using text messages and email.

Every message will contain specific details on how to contact dispatch and respond to requests.

Responding parties must respond as detailed in the message.

A request may advise to **call** "Dispatcher Name" at 586-xxx-xxxx.

In this case as stated **call** the dispatcher and advise of availability and interest in responding.

A request may advise to **text** to "Dispatcher Name" at 586-xxx-xxxx.

In this case you must enter the number into your texting/messaging program and enter your response to the dispatcher.

Do not reply to the message you received, it does not go to the dispatcher!

Do not call if the Texcom message states to text to respond!

In all cases, include **your First and Last name** in the response.

The dispatcher will advise of any new updates to the call, information too large to type into the Texcom message, or of a sensitive nature that can't be openly distributed.

The dispatcher may also advise of a CERT Member in Charge (CIC) in charge of the call-out as well as names of other responding members and any preliminary instructions or recommended equipment.

All responding members must report directly to the CIC and follow their directions. With the exception of emergency first aid, members are not to begin response unless directed by Warren CERT. With the exception of emergency conditions members are not to leave the response without checking out with the CIC.

New members will also be advised that they are not to perform any action until the CIC arrives, new members must wait on the side lines, in safe location until given instructions by the CIC or dispatcher.

No member will respond to a call until they have checked in with dispatch!

In all references in the above to dispatcher it refers to the CERT dispatcher, under normal circumstances no contact will be made directly to Warren PD 911 dispatch!

Should a situation or problem develop on a call-out notify CIC immediately. If an emergency develops and CIC is unresponsive or incapacitated notify then notify Warren PD dispatch

Check and update your texcom.com information occasionally. Phone numbers and email addresses do change.

do 1 thing

Being prepared for disasters and emergencies can seem like a big job. Many people don't know where to start, so they never start at all. With Do 1 Thing you can take small steps that make a big difference in an emergency.

Do 1 Thing is a 12-month program that makes it easy for you to prepare yourself, your family, and your community for emergencies or disasters.

Warren CERT is proud to be a partner with do 1 thing. Every month we will be showcasing some of the information from do 1 thing for Individuals and Business's.

Individual:

Family Communication Plan

Goal for July: Have the ability to communicate with family members during a disaster.

Today we have more ways to speak with one another than ever before. We are used to staying in touch with cell phones, internet, and email, but disasters can change things. These devices may not be available. Cell phone towers quickly become overloaded with people trying to reach friends and family. If the power is out at your home, cordless phones, internet, and email will not work either

Tasks

Family Communication Plan: Have a phone with a cord and a car charger for your cell phone standing by in case of a power failure.

Family Communication Plan: Develop a plan for how your family will stay in touch during a disaster.

Family Communication Plan: Program In Case of Emergency (ICE) numbers into all family cell phones.

Read More: <http://do1thing.com/topics/communication>

Business:

Communication

Goal for Step 7: Develop strategies to communicate employees, suppliers, and customers during an emergency

Communication is even more critical during a disaster or emergency. You must be able to get information about the event and to share information with staff, customers, and suppliers. Look at the ways that you communicate on a day to day basis and find ways to ensure that you can continue to communicate effectively when your business is affected by disaster.

Tasks

Communication: Determine what events might cause communication systems to fail, and take steps to minimize risk.

Communication: Ensure redundant systems are in place for key communication systems.

Communication: Create a communication plan that will allow you to reach your employees, suppliers, and key customers in the event of a disaster.

Read More: <http://do1thing.com/topics/biz-communication>

Thank You to do1thing <http://do1thing.com/>
A Warren CERT Partner

COOL PRODUCTS PAGE

Tired of losing expensive pocket pens? Sick of being jabbed in the leg by pens designed for desktop use? Want a compact, lightweight, affordable pocket pen?


You are not alone! Pokka Pen – the perfect pocket pen!

The "perfect" pocket pen



 The Pen That Fits **YOUR JEANS**

Pokka Pens are compact, lightweight and affordable. Carry one everywhere, every day.



The Story



[Shop](#)

CERT Assists in Active Shooter Exercise

